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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,020	07/14/2003	Fumihiko Sano	240306US2	4013
22850	7590	08/13/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			HUYNH, ANDY	
			ART UNIT	PAPER NUMBER
			2818	

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/618,020	Applicant(s) SANO, FUMIHIKO	
	Examiner Andy Huynh	Art Unit 2818	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2004.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
 4a) Of the above claim(s) 13-24 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-5 and 7-11 is/are rejected.
 7) ☒ Claim(s) 6 and 12 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 14 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>07/14/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

In the Response to the Restriction Requirement dated July 9, 2004, Applicant has elected without traverse Group I, claims **1-12**, drawn to a device is acknowledged. Accordingly, claims **13-24** are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 35 § 1.142(b) and MPEP § 821.03. Applicant has the right to file a divisional application covering the subject matter of the non-elected claims **13-24**, drawn to a method.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file on July 14, 2003.

Information Disclosure Statement

This office acknowledges receipt of the following items from the applicant: Information Disclosure Statement (IDS) filed on July 14, 2003. The references cited on the PTOL 1449 form have been considered.

Claim Objections

Claim **7** is objected to because of the following reasons.

In line 2, "a metal electrode on one side" should read --a metal electrode on one side of an MIM structure capacitor--, in line 5, "a metal electrode on the other side"

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should read –a metal electrode on the other side of the MIM structure capacitor--, and in lines 8-9, "... said metal electrode on one side" should read –said metal electrode on one side of the MIM structure capacitor.

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims **1-5 and 7-11** are rejected under 35 U.S.C. 102(b) as being anticipated by Emma et al. (USP: 6,285,050 hereinafter referred to as "Emma").

Regarding claim **1**, Emma discloses in Figs. 2 and 3b and corresponding texts as set forth in column 3, line 31-column 5, line 16, a semiconductor integrated circuit device/a thin film capacitor comprises an MIM structure capacitor (321, 323, 325, 323', 327) connected between a power source potential electrode wiring (VDD, 329, 118, M2, M3) and a ground potential electrode wiring (GND, 329, 118, M3, M4) each via at least one interlayer connection wiring (329).

Regarding claims **2 and 8**, Emma discloses in Figs. 2 and 3b, the semiconductor integrated circuit device wherein a metal electrode (321) on one side of said MIM

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structure capacitor is connected to said power source potential electrode wiring via two or more interlayer connection wirings (118, 329) and at least one metal wiring layer (M3).

Regarding claims **3 and 9**, Emma discloses in Figs. 2 and 3b, the semiconductor integrated circuit device wherein a metal electrode (327) on the other side of said MIM structure capacitor is connected to said ground potential electrode wiring via two or more interlayer connection wirings (118, 329) and at least one metal wiring layer (M4).

Regarding claims **4 and 10**, Emma discloses in Figs. 2 and 3b, the semiconductor integrated circuit device wherein said power source potential electrode wiring and said ground potential electrode wiring are adjacent to each other via an insulation film (129).

Regarding claims **5 and 11**, Emma discloses in Figs. 2 and 3b, the semiconductor integrated circuit device wherein said power source potential electrode wiring is a power source potential electrode pad to which a power source potential is supplied and an external wiring is connected, and said ground potential electrode wiring is a ground potential electrode pad which is grounded and to which an external wiring is connected.

Regarding claim **7**, Emma discloses in Figs. 2 and 3b and corresponding texts as set forth in column 3, line 31-column 5, line 16, a semiconductor integrated circuit device/a thin film capacitor comprises:

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a metal electrode (321) on one side connected to a power source potential electrode wiring (VDD, 329, 118, M2, M3) via at least one interlayer connection wiring (329);

a metal electrode (327) on the other side connected to a ground potential electrode wiring (GND, 329, 118, M3, M4) via at least one interlayer connection wiring (329); and

an insulation dielectric (323,325, 323') sandwiched by said metal electrode on one side and said metal electrode on the other side.

Allowable Subject Matter

Claims 6 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, since the prior made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations.

Emma fails to teach the claimed limitation the semiconductor integrated circuit device where the power source potential electrode wiring is a loop-shaped power source potential electrode wiring which is formed in a loop shape around a semiconductor integrated circuit body and to which a power source potential is supplied, and the ground potential electrode wiring is a loop-shaped ground potential electrode wiring which is formed in a loop shape around the semiconductor integrated circuit body and is grounded.

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Conclusion

A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the day of this letter. Failure to respond within the period for response will cause the application to become abandoned (see M.P.E.P 710.02(b)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy Huynh, (571) 272-1781. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571) 272-1787. The Fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the -status of this application or proceeding should be directed to the receptionist whose phone number is (703) 308-0956.

ah

July 30, 2004



Andy Huynh

Patent Examiner